In the Specification:

Before the claims, please insert the sequence listing.

Please amend the specification as shown:

Please delete paragraph [0084] and replace it with the following paragraph:

[0084] Table 2 provides amino acid **(SEQ ID NO: 8)** and nucleic acid **(SEQ ID NO: 9)** sequences for a PDE5A phosphodiesterase domain. Numbering on the amino acid sequence does not correspond to standard numbering for native PDE5A. **The primers are shown in SEQ ID NOS 3-4, respectively.**

Please delete paragraph [0085] and replace it with the following paragraph:

[0085] Table 3 provides an alignment of phosphodiesterase domains for several phosphodiesterases, **(SEQ ID NOS 10-31, respectively, in order of appearance)** including human PDE5A, providing identification of residues conserved between various members of the set.

Please delete paragraph [0086] and replace it with the following paragraph:

[0086] Table 4 provides the nucleic acid **(SEQ ID NO: 1)** and amino acid **(SEQ ID NO: 2)** sequences for human PDE5A phosphodiesterase.

Please delete paragraph [0311] and replace it with the following paragraph:

[0311] PDE5A cDNA sequence was amplified from a Human Kidney QUICK-Clone cDNA library (Clontech, #7112-1) by PCR using the following primers:

PDE5A-S: 5'-GTCGTAT CATATG TCAGCAGCAGAGGAAGAAAC-3' 33 mer **(SEQ ID NO: 3)**
PDE5A-A: 5'-TCTGCA GTCGAC AGGCCACTCAGTTCCGCTTG-3' 32 mer **(SEQ ID NO: 4)**

Please delete paragraph [0313] and replace it with the following paragraph:

[0313] The sequence of pET15S **(SEQ ID NOS 5-6)**, with multi-cloning site is shown below:

```
T7 promoter
AGATCTCGATCCCGCGAAATTAATACGACTCACTATAGGGGAATTGTGAGCGGATAACAATTCCCC

                                    RBS
TCTAGAAATAATTTTGTTTAACTTTAAGAAGGAGATATACC

                                                                  NdeI
ATGGGCAGCAGCCATCATCATCATCATCACAGCAGCGGCCTGGTGCCGCGCGGCAGCCATATGGGATCCGG
 M  G  S  S  H  H  H  H  H  H  S  S  G  L  V  P  R  G  S  H  M --------

         StuI     SalI
AATTCAAAGGCCTACGTCGACTAGAGCCTGCAGTCTCGACCATCATCATCATCATCATTAATAAAAGGCCC
---------------------- *

                                SpeI  BamHI
AATTCCACCACACTCCGGCCGTTACTAGTGGATCCGGCTGCTAACAAAGCCCGAAAGGAAGCTGAGTTGG
  IVEX-3 Primer

           Bpu1102 I                          T7 terminator
CTGCTGCCACCGCTCAGCAATAACTAGCATAACCCCTTGGGGCCTCTAAACGGGTCTTGAGGGGTTTTTTG
               3'-PET Primer
```

Please delete paragraph [0314] and replace it with the following paragraph:

[0314] pET15S vector is derived from pET15b vector (Novagen) for bacterial expression to produce the proteins with N-terminal His6 **(SEQ ID NO: 7)**. This vector was modified by replacement of NdeI-BamHI fragment to others to create a SalI site and stop codon (TAG). Vector size is 5814 bp. Insertion can be performed using NdeI-SalI site.